

ABSTRACT OF THE DISCLOSURE

A self-correcting wireless inertial navigation system and method employ a mobile unit having an inertial sensor and a transmitter connected to the output of the initial sensor for broadcasting an RF measurement signal. A base station has receivers responsive to the signal, an interferometer connected to the receivers and a processor programmed to obtain inertial measurements from the signal and to correct the measurements in accordance with phase difference triangulation information derived by the interferometer.